Congress of the United States Washington, DC 20515

February 25, 2020

The Honorable Kathy Castor Chairwoman House Select Committee on the Climate Crisis H2-359 Ford Building Washington, DC 20515

The Honorable Garrett Graves
Ranking Member
H2-359 Ford Building
House Select Committee on the Climate Crisis
Washington, DC 20515

Dear Chairwoman Castor and Ranking Member Graves:

As the Select Committee prepares findings and recommendations for the House of Representatives, we urge you to recognize the important contribution renewable fuels make in reducing carbon emissions from the transportation sector and offer recommendations that support expanded use of biofuels as a cost-effective and readily available solution for further decarbonization.

According to the Energy Information Administration (EIA), transportation-related greenhouse gas emissions are increasing, as is demand for both gasoline and diesel fuel. Even as electric vehicles enter the marketplace, EIA projects that vehicles powered by liquid fuels will make up 75 percent of vehicle sales in 2050. Because of high costs, electric vehicles could remain out of reach to many consumers. However, near-term emissions reductions in the transportation sector – including heavy-duty transportation – could be accelerated by greater use of lower-cost biofuels as renewable fuels such as ethanol and biodiesel offer readily available, affordable solutions with a shrinking carbon footprint.

The Select Committee must consider the declining carbon intensity of biofuels, as well as future decreases that can bring biofuels near net-zero emission by 2050. Federal lifecycle analysis (LCA), such as the Department of Energy's Argonne National Lab Greenhouse gases, Regulated Emissions, and Energy use in Transportation (GREET) model, show that ethanol's carbon intensity is declining due to improved efficiency in ethanol production, advancements and wider adoption of more efficient farming practices and increased crop productivity that uses existing crop land efficiently and is not producing land cover change. The 2018 GREET model shows corn-based ethanol's carbon intensity is 41 percent below the carbon intensity of baseline gasoline, compared to 19 percent less than gasoline's in 2010.

The 2018 LCA of corn-based ethanol from the U.S. Department of Agriculture (USDA) shows corn-based ethanol currently results in 43 percent lower GHG emissions than gasoline when produced at a natural gas-powered ethanol facility, the standard for today's biorefineries. The USDA analysis also finds that, going forward, additional low-carbon improvements in farm practices and ethanol production could result in ethanol that is 70 percent lower in GHG emissions than gasoline. The addition of technologies such as carbon capture and sequestration and accounting for soil carbon sequestration would push ethanol to carbon neutrality.

Already considered an advanced biofuel, biodiesel reduces lifecycle GHG emission between 50 and 86 percent compared to diesel. Biomass-based diesel regularly fills more than 90 percent of the annual required volumes for advanced biofuel under the Renewable Fuel Standard (RFS). Moreover, it reduces emissions of unburned hydrocarbons by 67 percent, carbon monoxide by 48 percent, and ozone potential of speciated hydrocarbons by 50 percent. In so doing, biodiesel reduces smog and ozone formation for healthier air.

States also recognize the low-carbon benefits of biofuels in their policies. The California Air Resources Board (CARB) relies on biofuels to meet the state's Low Carbon Fuel Standard (LCFS). Biodiesel, renewable diesel, and ethanol generate nearly 75 percent of the state's LCFS credits, and these fuels are also responsible for most of the credit generation in Oregon's Clean Fuels Program. While room for additional improvements in modeling, CARB also recognizes the significant improvements in biofuels' carbon intensity. In 2011, CARB reported the average carbon intensity (CI) for ethanol at 88 grams of CO2. Through the first half of 2019, the average recorded CI for ethanol has decreased to 63 grams, a 29 percent reduction in CI.

Currently the RFS is the only federal statutory GHG reduction requirement, providing biofuels access to a closed market otherwise monopolized by the oil industry. The RFS has reduced GHG emissions by 600 million metric tons since 2007 due to greater than expected reductions from conventional ethanol and despite slower expansion of next generation fuels than expected. Overall, biomass-based diesel has achieved more than 25 million tons in annual GHG reductions to date under the RFS by displacing fossil petroleum.

The U.S. biodiesel industry is poised to achieve more than 35 million tons of annual GHG reductions by 2022 if federal policy properly incentivizes the use of existing feedstocks and existing installed production capacity. If policy stalls, so will the potential GHG reductions that the biodiesel industry is ready to deliver. By administering the RFS according to Congressional intent, more emissions reductions could be achieved from both ethanol and biodiesel use, such as by fully accounting for waived gallons, timely issuance of pathway approvals and facility registrations and adoption of a post-2022 "set" rule supporting growth.

In November 2019, the price of E10, which makes up 97 percent of the fuel in the country ranged from 30 to nearly 40 cents per gallon cheaper than gasoline without ethanol, and the consumer price continues to fall the greater the percentage of biofuels in each gallon. With removal of unnecessary regulatory barriers, the availability of E15 continues to expand, along with the availability of E85 flex fuel. Updating policies to pave the way for high octane midlevel blends would reduce emissions and lower costs.

With greater biofuel use, transportation costs and GHG emissions can both be reduced without causing economic harm to families. We urge the Select Committee to support expanded use of low-carbon biofuels as a cost-effective solution for further decarbonization that can be implemented now.

Sincerely,

Angie Gaig

Member of Congress

Cheri Bustos Member of Congress

Don Bacon

Member of Congress

Collin C. Peterson Member of Congress

Emanuel Cleaver, II

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Dave Loebsack Member of Congress

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